

**Amendments to the Drawings:**

The attached replacement drawing sheet makes changes to Fig. 1 and replaces the original sheet with Fig. 1.

Attachment: Replacement Sheet

**REMARKS**

Claims 1, 3, 4 and 8-14 are pending in this application. By this Amendment, the specification, drawings and claims 1 and 8 are amended, and claims 10-14 are added. The amendments and added claims introduce no new matter. Exemplary support for the amendment to claim 1 can be found on page 12, line 19 - page 13, line 2 and Fig. 6. Exemplary support for claim 10 can be found on page 15, line 22 - page 16, line 2 and Fig. 11. Claims 2 and 5-7 are canceled without prejudice to, or disclaimer of, the subject matter recited in those claims. Reconsideration of the application based on the above amendments and following remarks is respectfully requested.

The Office Action objects to Fig. 1 under MPEP §608.02(g) as not designating a legend such as Prior Art. The amendment to the drawing obviates this objection.

The Office Action further objects to the drawings as failing to comply with 37 C.F.R. §1.84(p)(5) because they include element 200 of Fig. 15(B) which is not mentioned in the description. The amendment to the specification obviates this objection.

The Office Action objects to the drawings under 37 C.F.R. §1.83(a) because the drawings fail to show every feature of claim 2. The cancellation of claim 2 obviates this objection.

The Office Action rejects claim 8 under 35 U.S.C. §112, second paragraph. The Office Action further rejects claim 8 under 35 U.S.C. §101. The amendments to claim 8 obviate these rejections.

Reconsideration and withdrawal of the above formal objections and rejections are respectfully requested.

The Office Action rejects claims 1-4, 8 and 9 under 35 U.S.C. §102(b) over U.S. Patent No. 3,581,090 to Brown; rejects claims 5 and 7 under 35 U.S.C. §103(a) over Brown in view of U.S. Patent No. 5,118,948 to Ito et al. (hereinafter "Ito") and U.S. Patent

Application Publication No. 2006/0065844 to Zelakiewicz et al. (hereinafter "Zelakiewicz"); and rejects claim 6 under 35 U.S.C. §103(a) over Brown in view of Ito and U.S. Patent No. 7,339,170 to Deliwala. These rejections are respectfully traversed.

Without conceding the interpretation, or application, of the applied references, and solely to advance prosecution of this application, independent claim 1 is amended to clarify relevant features. For example, claim 1 recites "[a] direction finding radiation detector for detecting a direction of incidence of radioactive rays, the detector comprising: a plurality of scintillators made of the same material, being arranged to overlap circumferentially at least in part so that they are shadowed by each other from radioactive rays incident in circumferential directions and so that light emitted from one of the scintillators is not incident on the other scintillators; and photoreceptor devices each having a light receiving surface optically coupled to each of the scintillators, wherein a combination of proportions of radioactive rays incident directly on the respective scintillators and radioactive rays incident indirectly, being shadowed by the other scintillators, varies with the direction of incidence circumferentially, and the scintillators are connected to amplifiers having respective different gains to shift peak positions with each other, the amplifiers are connected to a single A/D converter, and the A/D converter is connected to a single pulse height analyzer." The references are not applied in a manner to have reasonably suggested such features.

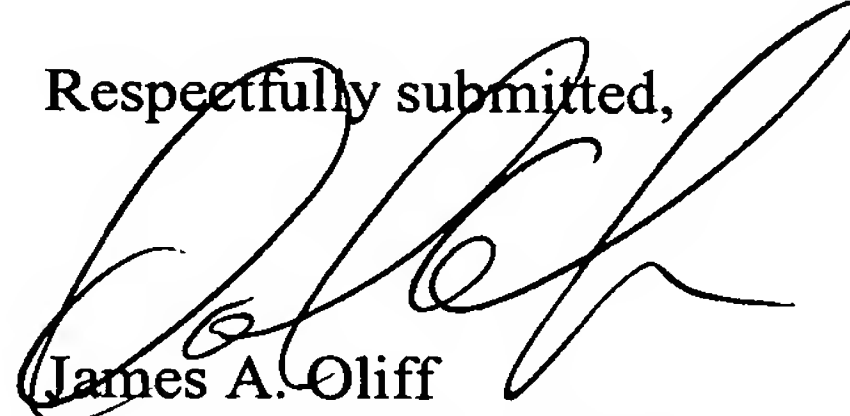
For at least the above reasons, the applied reference does not teach the combinations of features positively recited in independent claim 1. Additionally, claims 3, 4, 8 and 9 are also neither taught, nor would they have been reasonably suggested, by the applied references for at least the respective dependence of these claims, either directly or indirectly, on an allowable base claim, as well as for the separately patentable subject matter that each of these claims recites. Accordingly, reconsideration and withdrawal of the rejections of claims 1, 3, 4, 8 and 9 are respectfully requested.

Added claim 10 recites "[a] direction finding radiation detector for detecting a direction of incidence of radioactive rays, the detector comprising: a plurality of scintillators made of the same material, being arranged to overlap circumferentially at least in part so that they are shadowed by each other from radioactive rays incident in circumferential directions and so that light emitted from one of the scintillators is not incident on the other scintillators; and photoreceptor devices each having a light receiving surface optically coupled to each of the scintillators, wherein a combination of proportions of radioactive rays incident directly on the respective scintillators and radioactive rays incident indirectly, being shadowed by the other scintillators, varies with the direction of incidence circumferentially, and the scintillators are connected to respective amplifiers, the amplifiers are connected to A/D converters having respective different conversion rates to shift peak positions with each other, and the A/D converters are connected to a single pulse height analyzer." The applied references do not teach or reasonably suggest such features.

Additionally, claims 11-14 are also neither taught, nor would they have been reasonably suggested, by the applied references for at least the respective dependence of these claims, either directly or indirectly, on an allowable base claim, as well as for the separately patentable subject matter that each of these claims recites. In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 3, 4 and 8-14 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Daniel A. Tanner, III  
Registration No. 54,734

JAO:TRC/jnm

Attachment:

Petition for Extension of Time  
Replacement Sheet (Fig. 1)

Date: August 1, 2008

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 320850**  
**Alexandria, Virginia 22320-4850**  
**Telephone: (703) 836-6400**

<p><b>DEPOSIT ACCOUNT USE AUTHORIZATION</b> Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
---